The illusion of the dialectical: why neuroscience and social psychology demonstrate that confrontation does not educate

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Summary

The dialectical tradition, from Plato to Marx and Hegel, has dominated Western educational thought by presenting the conflict of ideas as the supreme method for attaining truth and emancipation. This article subjects that paradigm to critique in light of contemporary advances in neuroscience, social psychology, and theory of mind. It argues that the thesis-antithesis-synthesis scheme is scientifically unsustainable for three fundamental reasons: first, because the diversity of human perspectives is irreducible to a single antithesis; second, because knowledge does not emerge from a unifying synthesis but from a polyphony of voices that coexist without merging; third, because in dialectical confrontation what prevails is not the force of reason but the reason of force, thereby reproducing structures of domination. In opposition to this tradition, *dialogics* is proposed as a pedagogical alternative based on encounter, active listening, and the collective construction of knowledge. Dialogical education, consistent with our relational and empathetic nature, offers a path to overcome the exclusion and alienation generated by the dialectical model.

Keywords: Dialectics, dialogics, relational pedagogy, neuroscience, theory of mind, mirror neurons, confirmation bias, cognitive dissonance, dialogical education, polyphony.

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1. Introduction: The dialectical mirage

For over two millennia, the dialectical tradition has been venerated as the supreme method of critical thought and emancipation. From Plato to Marx, through Hegel, dialectics has been presented as the royal road to truth: a thesis confronts its antithesis, and from their struggle a superior synthesis is born. This

scheme, as elegant as it is deceptive, has permeated philosophy, politics, and above all, education.

However, advances in neuroscience, social psychology, and theory of mind in recent decades have revealed that this model is not only scientifically unsustainable but also profoundly harmful to human development. Dialectics, far from being a dialogue, is a disguised form of monologue that reproduces domination and excludes diversity. In contrast, *dialogics*—genuine dialogue as encounter and collective construction—emerges not as one more philosophical option but as the only alternative consistent with our relational nature.

2. The myth of the single antithesis: the irreducible diversity of voices

The first pillar of dialectics is the belief that to each thesis corresponds a single antithesis, a sole contradiction that, once resolved, leads to a synthesis. This binary scheme is a crude oversimplification of reality. Neuroscience and cognitive psychology have demonstrated that human beings do not process information dichotomously, but through complex neural networks that integrate multiple perspectives simultaneously. *Theory of mind*—our capacity to attribute mental states to others (Premack & Woodruff, 1978)—reveals that each person possesses a unique point of view, shaped by their history, culture, and emotions. There is no single antithesis, but as many as there are individuals participating in a conversation.

As Michael Tomasello (2007) points out, humans are cooperative beings who develop our cognition in interaction with others. The *recursivity* of our thought allows us not only to understand the other's perspective but also the perspective the other has of ours, and so on. This complexity renders the dialectical scheme of thesis and antithesis unworkable: in any real debate, positions are multiple, changing, and contextual. Reducing them to two opposing poles is an epistemic violence that silences the richness of intermediate voices.

Furthermore, research on *confirmation bias* (Nickerson, 1998) shows that human beings tend to seek and privilege information that confirms our preexisting beliefs. Dialectical confrontation, far from opening us to new ideas, reinforces our initial positions and makes us more rigid. Empirical evidence demonstrates that adversarial debate does not lead to the search for truth but to polarization and the entrenchment of prejudices. Dialectics, in practice, is not a method of inquiry but a mechanism of self-persuasion.

3. Polyphony versus synthesis: voices that sing together without merging

Bakhtin (1999), the great theorist of the polyphonic novel, already warned that truth is not the result of a synthesis that annuls differences but of a dialogue in which voices coexist without being lost. Dialectics, in seeking a synthesis, aspires to a uniformity that betrays the nature of language and consciousness. Neuroscience supports this intuition: *mirror neurons* (Rizzolatti & Craighero, 2004) allow us to understand the actions and intentions of others, not to annul them in a fusion but to establish an empathic resonance that respects alterity. Empathy, as Daniel Goleman (2006) has demonstrated, is not a diffuse feeling but a cognitive and affective process that connects us with the other without dissolving their singularity.

In the educational field, Paulo Freire's pedagogy (1993, 1997) recovers this idea: dialogue is not a method for reaching a forced agreement but a process in which educators and learners transform each other mutually. Dialectical synthesis, on the contrary, imposes an artificial closure on a conversation that, by its very nature, is unfinished. As Sidorkin (2007) writes, education does not consist of reducing diversity nor standing still watching it grow, but of converting simple diversity into *diversity of connection*.

Current cognitive science confirms that meaningful learning does not occur in confrontation but in collaboration. Studies on *cooperative learning* (Johnson & Johnson, 1989) demonstrate that students who work together, sharing perspectives and constructing knowledge jointly, achieve better results than those who compete or debate. Polyphony, not synthesis, is the engine of intellectual development.

4. The reason of force: why conflict does not overcome domination

One of the most pernicious assumptions of dialectics is that the confrontation of ideas, if honest and rational, leads to truth and, therefore, to liberation. However, social psychology and neuroscience have shown that in a conflict between two positions, what prevails is almost never the force of reason but the reason of force. *Confirmation bias*, *cognitive dissonance* (Festinger, 1957), and power dynamics distort any debate.

Cognitive dissonance describes the discomfort we feel when our beliefs clash with contrary evidence. To reduce this discomfort, we tend to reinterpret the evidence or discredit the source, rather than change our convictions. In a

dialectical confrontation, the opponent is not an interlocutor but a threat to our identity; their defeat is not a step toward truth but a victory that reaffirms our ego.

Moreover, as philosopher Byung-Chul Han (2012) has pointed out, contemporary society is marked by the *positivity* of consensus and the *negativity* of conflict, but this conflict is almost always resolved in favor of the more powerful. In a world of oppressors and oppressed, the Hegelian dialectic of master and slave offers only two exits: either the slave becomes master—reproducing the logic of domination—or the master maintains their position. The exclusive structure is never overcome; only the actors are changed. This observation was already noted by Paulo Freire (2005) when he pointed out that oppression is the greatest school for forming oppressors, and that the oppressed who wishes to attain their freedom must, according to dialectical logic, become an oppressor themselves, thus reproducing the cycle of exploitation.

Social neuroscience, through the work of Jaak Panksepp (1998) and others, has demonstrated that prosocial emotions—empathy, care, attachment—are fundamental to the survival of our species. Dialectics, by privileging confrontation, neglects these basic needs and fosters a culture of aggressiveness and insensitivity. It is no coincidence that more equal and peaceful societies are those that promote dialogue and cooperation, not competition (Wilkinson & Pickett, 2009).

5. Educational implications: from dialectics to dialogics

The critique of dialectics is not a sterile academic exercise. It has direct consequences for educational practice. The current school system, steeped in dialectical logic, is organized around confrontation: exams, grades, rankings, competitive debates, selection of the best. This model not only generates anxiety and exclusion but also contradicts what we know about human learning.

Dialogics, in contrast, proposes an education based on encounter. This implies:

- **Recognizing the multiplicity of perspectives**: the classroom is not a battlefield between two ideas but a space where many voices coexist. The teacher is not an arbiter who decides which is best but a facilitator who helps weave connections between them. As Mascarell (2016) argues, "relational pedagogy attempts to overcome the dichotomous contradictions of these political positions [...] broadening the perspective

and redefining the very concept of pedagogy as 'the development of the educational function of human relations'."

- **Fostering active listening**: neuroscience tells us that empathy is trainable. Education must cultivate the capacity to put oneself in the other's place, not to refute them but to understand them. Social intelligence, as defined by Goleman (2006), is a set of skills that can and should be taught.
- **Prioritizing cooperation over competition**: studies on intrinsic motivation (Deci & Ryan, 1985) show that competition undermines interest and creativity. Meaningful learning occurs when people feel safe and valued, and when the goal is not to defeat the other but to grow with them.
- **Accepting incompleteness**: knowledge is not a finished product but a process. Dialogical education does not seek definitive answers but questions that open new horizons. This vision coincides with Bakhtin's (1999) when he affirms that "reality is unencompassable and we are singular beings in its interpretation, who generate truth in each relationship through a polyphonic dialogue that transforms us."

6. Conclusion: abandoning dialectics to embrace dialogue

The dialectical tradition has sold us a false promise: that conflict is the path to truth and freedom. Contemporary science demonstrates that it is exactly the opposite: conflict fuels polarization, reinforces prejudices, and perpetuates domination. Truth is not born from confrontation but from mutual recognition; freedom is not achieved by defeating the other but by building with them.

As argued in *Human Condition and Educational Action* (Mascarell, 2016), "true education does not reduce and exclude but amplifies and includes, contemplates the entire system and attempts to maintain its homeostasis in complexity and uncertainty." Dialectics is the daughter of an era that believed in absolute truths and reason as a weapon. Dialogics is the daughter of a time that recognizes diversity, fragility, and interdependence.

This is not about renouncing critical thought but about understanding it differently: not as combat but as an art of listening; not as synthesis but as polyphony; not as conquest but as encounter. Because, in the end, educating is not training soldiers for the battle of ideas but accompanying people in the discovery of their own voice and in the recognition of the voice of others. That is the only revolution worth undertaking.

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